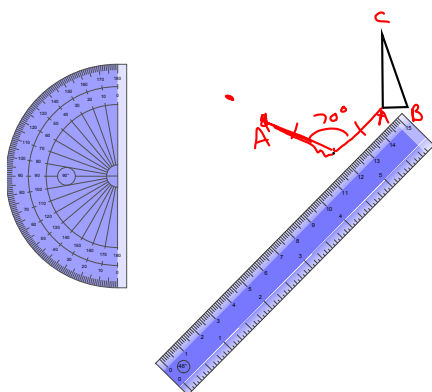


9.4 Perform Rotations

By hand.

Tools needed: ruler and protractor

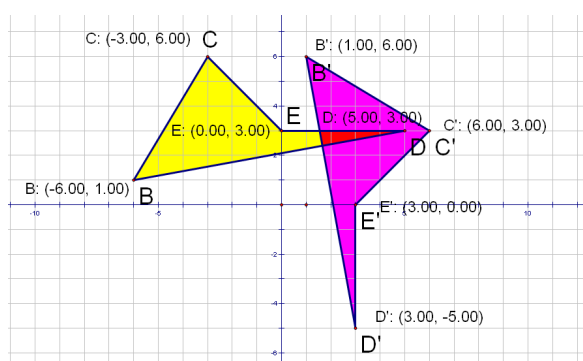
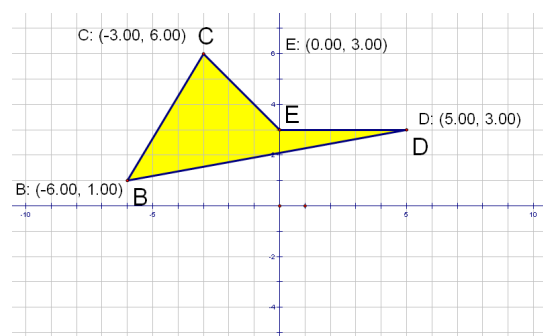


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Coordinate Summary for Rotations about the Origin

1. For a rotation of 90° , $(a, b) \rightarrow (-b, a)$
2. For a rotation of 180° , $(a, b) \rightarrow (-a, -b)$
3. For a rotation of 270° , $(a, b) \rightarrow (b, -a)$

Graph BCED and rotate it 270°



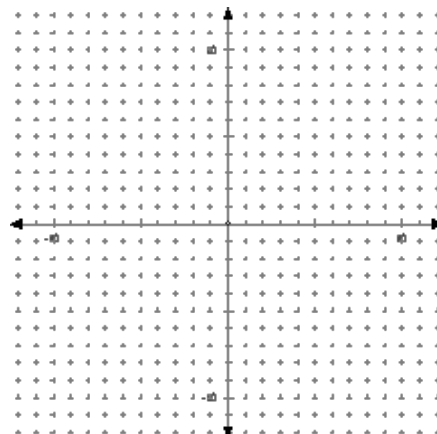
9.7 Identify and Perform Dilations

The vertices of XYZW are X(-4, 4) Y(2, 8) Z(6, 2) and W(-2, -4)

~~Use scalar mult. to find the image after a dilation centered at the origin with a scale factor of 5~~

Graph the preimage and image.

$$\begin{array}{l} X(-4, 4) \\ Y(2, 8) \\ Z(6, 2) \\ W(-2, -4) \end{array} \quad r = \frac{1}{2} \quad \begin{array}{l} X'(-2, 2) \\ Y'(1, 4) \\ Z'(3, 1) \\ W'(-1, -2) \end{array}$$

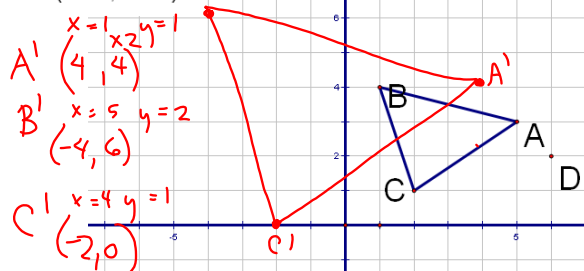


Dilate $\triangle ABC$ with a scale factor of 2 centered at D(6, 2)

A: (5.00, 3.00)

B: (1.00, 4.00)

C: (2.00, 1.00)



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HW p602 #s 3-9, 13
p629 #s 32

Attachments

9_4notes_ex.gsp

9_7notes_ex.gsp